

Title (en)  
NON-AQUEOUS ELECTROLYTE CELL

Title (de)  
NICHTWÄSSRIGE ELEKTROLYTISCHE ZELLE

Title (fr)  
CELLULE ELECTROLYTIQUE NON-AQUEUSE

Publication  
**EP 1209754 A1 20020529 (EN)**

Application  
**EP 00977985 A 20001128**

Priority  
• JP 0008376 W 20001128  
• JP 33713099 A 19991129  
• JP 33713199 A 19991129  
• JP 2000325310 A 20001025

Abstract (en)  
The non-aqueous electrolyte battery of the present invention has a negative electrode comprising metallic lithium, a lithium alloy or a material capable of absorbing and desorbing lithium; a positive electrode; a non-aqueous electrolyte comprising a solvent and a solute dissolved in the solvent, wherein the above non-aqueous electrolyte contains at least one additive selected from phthalimide, derivative of phthalimide, phthalimidine, derivative of phthalimidine, tetrahydrophthalimide and derivative of tetrahydrophthalimide. On account of the effect of the above additive, the non-aqueous electrolyte battery of the present invention is not liable to cause an increase in the internal resistance during a long-term storage at high temperatures, and the charge/discharge cycle characteristics are improved in a secondary battery. <IMAGE>

IPC 1-7  
**H01M 10/40**

IPC 8 full level  
**H01M 6/16** (2006.01); **H01M 10/05** (2010.01); **H01M 10/052** (2010.01); **H01M 10/0567** (2010.01); **H01M 10/0568** (2010.01); **H01M 10/0569** (2010.01); **H01M 10/42** (2006.01); **H01M 2/02** (2006.01)

CPC (source: EP KR US)  
**H01M 6/168** (2013.01 - EP US); **H01M 10/052** (2013.01 - EP US); **H01M 10/0525** (2013.01 - KR); **H01M 10/0566** (2013.01 - KR); **H01M 10/0567** (2013.01 - EP US); **H01M 10/4235** (2013.01 - EP US); **H01M 6/166** (2013.01 - EP US); **H01M 10/0525** (2013.01 - EP US); **H01M 10/0568** (2013.01 - EP US); **H01M 10/0569** (2013.01 - EP US); **H01M 50/109** (2021.01 - EP US); **H01M 2300/0037** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Cited by  
CN110707310A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1209754 A1 20020529**; **EP 1209754 A4 20051005**; **EP 1209754 B1 20111005**; CN 1174515 C 20041103; CN 1338129 A 20020227; JP 3720300 B2 20051124; KR 100414718 B1 20040113; KR 20020018646 A 20020308; TW 475295 B 20020201; US 6641957 B1 20031104; WO 0141247 A1 20010607

DOCDB simple family (application)  
**EP 00977985 A 20001128**; CN 00803016 A 20001128; JP 0008376 W 20001128; JP 2001542415 A 20001128; KR 20017009330 A 20010725; TW 89125234 A 20001128; US 88921501 A 20010712